

# Diagnosis of Enterotoxigenic Escherichia coli (ETEC)

## Problem

Traveler's diarrhea is a specific subtype of acute diarrhea, typically caused by a bacterial infection. It affects up to 40% of travelers visiting underdeveloped regions worldwide and accounts for 33.5% of medical visits upon their return. Accurate diagnosis of these infections is crucial for precise patient treatment, as there is a possibility of adverse reactions caused by medication in specific cases. Currently, there is no test available in the market that can differentiate diarrheagenic infections caused by all subtypes of E. coli, including Enterotoxigenic Escherichia coli (ETEC).

## Solution

This solution involves the development of a recombinant protein, antibodies, and an immunoassay capable of identifying E. coli, specifically subtype ETEC, by detecting the EtpA protein. The antibodies have been validated using flow cytometry combined with magnetic microspheres and have the potential for use in other immunoassays. This technology is versatile and can be applied to any immunological detection method.

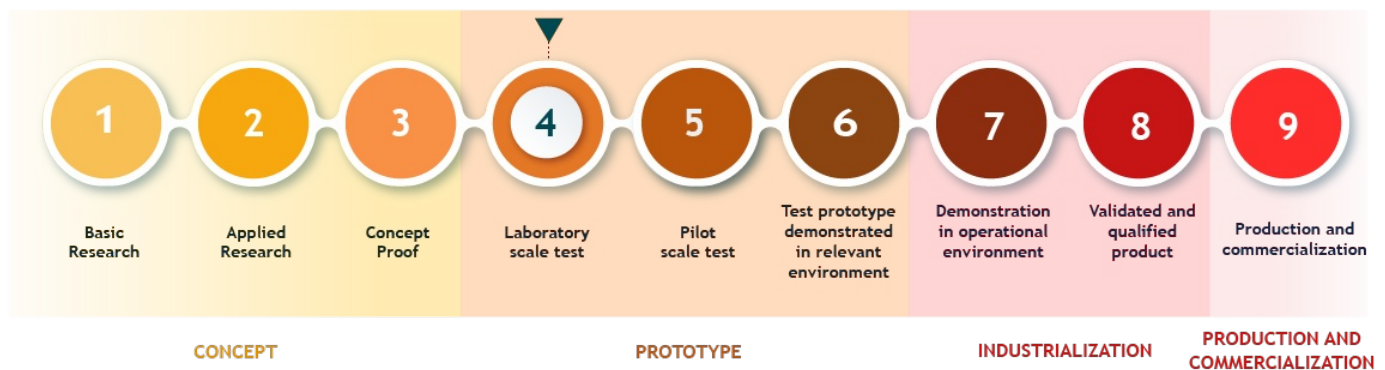
## Differential

Specificity

Versatility

Detects the new EtpA marker

## Development stage



## What we are searching for

Seeking partnerships with companies interested in co-development and/or licensing for the production and commercialization of the recombinant protein or anti-EtpA antibodies, as well as the development of a diagnostic kit

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## Inventors

Luis André Morais Mariúba

## Intellectual Property

Type  
Invention Patent



Description  
Patent application filed in Brazil.

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Campus Fiocruz Maré - Av. Brasil, 4036 - Maré, Rio de Janeiro  
- RJ

CEP: 21040-361



[portfolio@fiocruz.br](mailto:portfolio@fiocruz.br)



+55 (21) 3282-9080